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Herbert J. Hovenkamp

University of Pennsylvania Carey Law School

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A Preface to Neoclassical Legal Thought

Herbert Hovenkamp*

Introduction

This preliminary essay explores the roots of fundamental changes in American legal thought that began to take hold in the United States after Reconstruction. It is written in contemplation of a larger project that is not yet finished. The term “neoclassical legal thought” seems appropriate to describe this set of developments for a number of reasons. First, neoclassical legal thought overlapped with but also succeeded its predecessor, classical legal thought. Although the term classical legal thought has been widely used in the literature of American legal history,¹ the term “neoclassical” legal thought has not been.² Second, the relationship between classical and neoclassical legal thought bears some important resemblances to the relationship between classical political economy and classical economics.

Because we still live in an era that is predominantly neoclassical, 1970 is a more-or-less arbitrary stopping point. It brings this discussion up to, but not really into, the rise of modern law and economics, deregulation, and the civil rights movements. The 1960s is a watershed period because so many seminal, policy-shifting works were published then, including James Landis’ *Report on Regulatory Agencies to the President Elect* (1960), Coase’s “Problem of Social Cost” (1960), Mancur Olson’s *Logic of Collective Action* (1965), and Calabresi’s *Cost of Accidents* (1970), to mention a few. During the same period legislative policy saw the Great Society and the 1960s civil rights

* Ben V. & Dorothy Willie Professor, University of Iowa College of Law.

¹ See, e.g., DUNCAN KENNEDY, *THE RISE AND FALL OF CLASSICAL LEGAL THOUGHT* (2006); WILLIAM M. WIECEK, *THE LOST WORLD OF CLASSICAL LEGAL THOUGHT AND IDEOLOGY IN AMERICA, 1886-1937* (1998); MORTON J. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW: THE CRISIS OF LEGAL ORTHODOXY, 1870-1960*, at 9-63 (1992); Herbert Hovenkamp, *Law and Morals in Classical legal Thought*, 82 IOWA L.REV. 1427 (1997); PATRICK S. ATIYAH, *THE RISE AND FALL OF FREEDOM OF CONTRACT* (1979) (similar, earlier developments in Great Britain).

² The only places it appears in the law review literature are in my own work. See Herbert Hovenkamp, *Knowledge about Welfare: Legal Realism and the Separation of Law and Economics*, 84 MINN.L.REV. 805, 823 (2000); Herbert Hovenkamp, *The Marginalist Revolution in Legal Thought*, 46 VAND.L.REV. 305, 327 (1993).

legislation. The first of these was the last gasp of New Deal social policy.³ The second represented the triumph of environmentalism over Darwinian genetic determinism.

Classical legal thought was the dominant legal theory in the United States from roughly the Civil War until the rise of Legal Realism and the Great Depression. Just as classical political economy saw markets as largely self-executing, so too classical legal theory believed that the law largely took care of itself, with only ad hoc intervention on the part of the state, and then mainly through judges, who were the umpires of both markets and the common law. In a very real sense Adam Smith's "invisible hand" of the market, which made order out of the chaos of individual trading, was also the invisible hand of the common law.

The marginalist revolution in economics changed that, initially for economics but later and very profoundly for legal theory as well. Just as Darwinism, marginalism was one of those great nineteenth century theories that every educated person was pretty much forced to accept, regardless of ideology. For that reason marginalist economics developed its own left and right wing ideologies. It became not only a technical doctrine, but also a heavily political one. For example, in the twentieth century marginalism provided the doctrinal underpinnings for the views that welfare can be increased by transferring wealth from the well off to the poor, and also that markets are fragile instruments requiring assistance from government regulation in the public interest. However, only two decades later marginalism developed the views that, setting aside monopoly and a few other cases of failure, markets work very well, and free exchange is the only type of resource movement that can be shown to be efficient. Further, government regulation is nothing more than a reflection of the wishes of the most effective interest groups.

The marginalist revolution provoked a deep intellectual crisis in economics, and during the decades from roughly 1875 to 1935 a great deal of fundamental economic theory had to be written. The marginalist revolution in law was equally profound, affecting every legal discipline, not just those that dealt expressly with commerce and trade. Indeed, of the two most important Victorian ideas, Darwinism and marginalism, the latter's influence on legal thought was much greater.

The title requires an explanation. I have published a few papers addressing this topic before using the term "marginalist," which is the strongest identifying characteristic of neoclassical thought.⁴ I have also used the term "neoclassical."⁵ While the term

³ For example, the Great Society was an "equal distribution" idea, while the Civil Rights statutes were "equal opportunity" provisions that did not guarantee equal outcomes but only an equal right to pursuit. An orthodox neoclassicist would dislike the first but embrace the second.

⁴ See *The Marginalist Revolution in Legal Thought*, 46 VAND. L. REV. 305 (1993), and "The Marginalist Revolution in Corporate Finance: 1880-1965" (SSRN, June, 2008).

“marginalist” is meaningful to economists and philosophers, it is not very helpful for a more general audience and may in fact scare them off. The word “neoclassical” may have the same effect, although the phrase “classical legal thought” is widely used in the literature of American legal history, initially by Morton Horwitz and Duncan Kennedy, and today by many others.⁶ Most historians speak of the period following classical legal thought as “progressive legal thought.”

However, as this discussion will develop, the term “progressive” legal thought creates an unwarranted bias in characterization. Neoclassicism is much broader, embracing a number of ideologies and movements that clearly would have been rejected by the progressives. It also creates the impression that conservatives clung to an obsolete “classical” ideology, when in fact they were in many ways just as revisionist as the progressives legal thinkers whom they critiqued. The Progressives⁷ and New Deal thinkers whom we identify with progressive legal thought were nearly all marginalists, but it is hardly the case that all marginalists were progressives. For example, the law and economics movement is certainly neoclassical and vehemently marginalist, but few people would place it into the category of progressive legal thought, and its practitioners include some of the harshest critics of Legal Realism. The lawyers and policy makers in the corporate finance battles of the 1920s, who advocated for the abolition of par value stock and the adoption of more forward looking theories of corporate valuation, were thoroughly marginalist in their reasoning, but by and large they were regarded by Progressives as the enemy.

Indeed, corporate finance and minimum wage policies are areas where progressive and corporation lawyers flipped against each other. On the minimum wage, corporate interests generally clung to the classical and backward looking wage fund theory which set an absolute limit on wages based on historically accumulated capital, while progressives embraced a forward looking marginal productivity theory. By contrast, in corporate finance the corporate interests generally rejected the view that corporate value should be driven by historically paid in capital as reflected in stated

⁵ Herbert Hovenkamp, *Neoclassicism and the Separation of Ownership and Control*, 4 VIRGINIA J.L. & BUS. REV. 374 (2009).

⁶ DUNCAN KENNEDY, *THE RISE AND FALL OF CLASSICAL LEGAL THOUGHT* (1975, 2006); MORTON J. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW, 1870-1960: THE CRISIS OF LEGAL ORTHODOXY* (1994); Stephen A. Siegel, *John Chipman Gray and the Moral Basis of Classical Legal Thought*, 86 IOWA L.REV. 1513 (2001); William M. Wiecek, *THE LOST WORLD OF CLASSICAL LEGAL THOUGHT: LAW AND IDEOLOGY IN AMERICA, 1886-1937* (1998); Herbert Hovenkamp, *Law and Morals in Classical Legal Thought*, 82 IOWA L.REV. 1427 (1997).

⁷ The term “Progressive” with a capital P refers to the Progressive movement (roughly 1890-1920) as distinct from later liberal movements such as the New Deal. By contrast, “progressive” refers to progressive legal thought generally, which is much broader in both scope and duration.

“par” value of shares. Rather, they believed that stated corporate value should be based on reasonable economic prospects, and that this made the concept of par value obsolete.

Like Darwinism, marginalism was a big tent that fed different and inconsistent ideologies. Describing the successor ideology to classical legal thought as “progressive” does not do justice to the range of views that the successors had. For example, Holmes was certainly post-classical and marginalist,⁸ but he was just as certainly not progressive. Indeed, he was hostile to both reform and to legislation, two things that progressive legal thought valued very highly. At any rate, I want to use a title that does not suggest that the topic of this project is either overly obscure or overly technical. Today we are all marginalists, even though many of us do not have a very good understanding of what that term means.

A second problem has to do with the balance of theory and interest group power in democratic policy making. Although the proposition should not be overstated, intellectual historians tend to believe that ideas drive society’s values and even its policy. Intellectual history, as opposed to social history, is often regarded as inherently conservative because it uses published writings as source materials. Traditionally, people who publish have been overwhelmingly elite, educated, white, and male. These attributions are less true of the twentieth century than earlier periods, and intellectual history today embraces gender, ethnic and cultural diversity much more than it did in the 1960s and earlier. In any event, intellectual history is an essential part of legal history, which is unavoidably a study of published documents, most of which were written by elites. Even radical or left leaning histories of law deal with the impact of published legislation or legal opinion on others.

A more fundamental question involves, not the continued viability of intellectual history as a discipline, but rather the relationship between ideas and policy. Today, we are more inclined to think that policy is driven by interest group pressure. Interest groups are motivated mainly by a search for wealth, well-being, or status, although some are certainly driven by ideology as well. Within this model, ideas are often viewed as little more than excuses that people in power use to rationalize their position.

Both the view that ideas count for nothing and that they count for everything⁹ are overly simplistic. Marginalist thought crossed ideological lines. Marginalist economics

⁸ On Holmes’ marginalism, see Herbert Hovenkamp, *Knowledge about Welfare: Legal Realism and the Separation of Law and Economics*, 84 MINN.L.REV. 805 (2000).

⁹ On the latter view, see the conclusion of the great post-classical economist JOHN MAYNARD KEYNES, *GENERAL THEORY OF EMPLOYMENT, INTEREST AND MONEY* 383 (“concluding notes”) (1936):

developed its own very powerful theories about policy making, and about the relationship between interest groups and welfare. On one side, it led to progressivity in tax policy, championed by Progressive marginalist economist Edwin R.A. Seligman; and the idea that workers' wages were limited by nothing more than the marginal contribution of each worker to the employer. This was typically a much higher number than subsistence required or that the classical wage fund theory argued as a natural limit on wages. Marginalism's strong environmentalism also eventually led to greater egalitarianism in race policy, although that change was not reflected in the writing of the Progressives, who attempted to be both marginalist and genetic determinist. On the other side, marginalism also led to a comprehensive revision of corporate finance theory and the modern theory of the large corporation, in which shareholders are all but irrelevant. Marginalism also gave us public choice theory and its deep distrust of government, developed in the work of Mancur Olson¹⁰ and Buchanan and Tullock¹¹ in the 1960s. The theory was derived directly from the model of perfect competition in neoclassical economics, and the authors were all economists. The same thing is true of Kenneth Arrow's impossibility theorem, whose assumptions are very strict and include both marginalist preference ordering and noncomparability of utilities.¹² In sum, both

. . . the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. Not, indeed, immediately, but after a certain interval; for in the field of economic and political philosophy there are not many who are influenced by new theories after they are twenty-five or thirty years of age, so that the ideas which civil servants and politicians and even agitators apply to current events are not likely to be the newest. But, soon or late, it is ideas, not vested interests, which are dangerous for good or evil.

¹⁰ MANCUR OLSON, JR., *THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS* (1965).

¹¹ JAMES M. BUCHANAN AND GORDON TULLOCK, *THE CALCULUS OF CONSENT: LOGICAL FOUNDATIONS OF CONSTITUTIONAL DEMOCRACY* (1962).

¹² KENNETH ARROW, *SOCIAL CHOICE AND INDIVIDUAL VALUES* (1951; 2d ed. 1963). See Herbert Hovenkamp, *Arrow's Theorem: Ordinalism and Republican Government*, 75 IOWA L. REV. 949 (1990) (offering a simple "proof" of the theorem). See Maxwell L. Stearns, *The Misguided Renaissance of Social Choice*, 103 YALE L.J. 1219, 1291 & n. 271 (1994); Lynn Stout, *Strict Scrutiny and Social Choice: an Economic Inquiry into Fundamental Rights and Suspect Classifications*, 80 GEO.L.J. 1787, 1795 (1992).

the Progressive critique, which optimistically saw regulation as enacted in the public interest, and the most cynical versions of public choice theory, are both completely grounded in marginalist economics. Marginalist thinking drove both the pro-legislative anti-common law reform missions of the Progressive Era and New Deal, and the pro-market, pro-common law, anti-legislative and deregulatory counterrevolution that largely occurred later.

An additional inquiry developed here concerns the role of formalism in legal thought. Formalism occurs on courts when judges begin to think that the legal system is “closed” in some important sense, or that the important questions have already been answered. Formalism has two dominant explanations, one in intellectual history and one which tends to dominate in social history. The intellectual history explanation, which recalls the arguments of such people as Thomas Kuhn, Arthur Lovejoy, Joseph Schumpeter, Merle Curti, or Richard Hofstadter,¹³ sees formalism mainly as a defensive reaction to an intellectual “crisis.” That is to say, a big idea has been developed and is widely accepted, but then is challenged from outside. Those supporting the status quo respond by building an intellectual wall that excludes or ignores ideas that do not fit the paradigm, or they develop rules that are governed strictly by premises that the paradigm supports. This persists until the force of the new idea is so powerful that it eventually breaks through.

The other perspective sees formalism mainly as what happens when a dominant group achieves its political goals and then wants to “freeze” them in place. Horwitz’s conclusion to *The Transformation of American Law*, entitled “The Rise of Legal Formalism,” states such a conclusion very bluntly. As he explains, the most powerful interests in American society were commercial ones who were frustrated by the precommercial state of the common law at the time of the American revolution. They developed a highly instrumental venture of transforming American law so as to make it more commercial, less agrarian, and to favor entrepreneurship. By 1850 “that transformation was largely complete.” At that time

If a flexible, instrumental conception of law was necessary to promote the transformation of the postrevolutionary American legal system, it was no longer needed once the major beneficiaries of that transformation had obtained the bulk of their objectives. There were, in short, major advantages in creating an intellectual system which gave common law rules the appearance of being self contained, apolitical, and inexorable, and which, by making “legal reasoning

¹³ THOMAS S. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* (1962); ARTHUR O. LOVEJOY, *THE GREAT CHAIN OF BEING: A STUDY OF THE HISTORY OF AN IDEA* (1936); JOSEPH SCHUMPETER, *HISTORY OF ECONOMIC ANALYSIS* (1954); MERLE CURTI, *THE GROWTH OF AMERICAN THOUGHT* (1943, REV. ED. 1951); RICHARD HOFSTADTER, *SOCIAL DARWINISM IN AMERICAN THOUGHT, 1860-1915* (1944).

seem like mathematics,” conveyed “an air ... of ... inevitability about legal decisions.”¹⁴

We generally think of formalism in law as something that dominated legal thinking from sometime around the Civil War¹⁵ until the early decades of the twentieth century, depending on where one looks. If one views Progressivism as a legislative movement as signaling the end of formalism, then it ended early in the twentieth century with the rise of large scale legislation concerning wages and hours and such federal initiatives as the Pure Food and Drug Act (1906) and the creation of the federal Bureau of Corporations (1903). By contrast, if one views the Supreme Court, which was both much older and much more conservative than the population, it probably did not end until Court packing (1937), although during much of this time the formalists carried the day by very slim (often 5-4) margins. A case can be made that we are in a new age of legal formalism on the Supreme Court. Some of the current Court’s attributes are eerily similar to those of the early twentieth century court – namely, a Court that is sharply divided, probably significantly more conservative than prevailing ideology, and increasingly disparaging of scholarship that threatens its majority views, or that is deemed excessively theoretical (to paraphrase some of CJ Roberts’ statements).¹⁶ One important characteristic of formalism is defensiveness – that is, it represents an effort to “lock in” a set of ideas that favors a dominant group and shield it from an outside attack. That was certainly true in the *Lochner* era.

Neoclassicism is somewhat less conducive to formalism than classicism was, however. Formalism is more difficult to discipline in a neoclassical regime. Classical economic thought had an historical theory of value and a deep hostility toward state interference in the economy. These views dominated the thought of all of the classicists to one degree or another. As a result classicism never developed a pronounced “left” and “right” wing. Classicists tended to debate about details, or else about whether such things as a high degree of economic and population development (England) or an undeveloped economy and vast wilderness (America) made any difference to policy making, but they agreed on most general principles. By contrast, marginalism has a

¹⁴ MORTON J. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW, 1780-1860* (1977) at 253-254, quoting Oliver William Holmes, Jr., *Privilege, Malice and Intent*, 8 HARV.L.REV. 1, 7 (1894); and KARL LLEWELLYN, *THE COMMON LAW TRADITION: DECIDING APPEALS* 38 (1960).

¹⁵ E.g., CHRISTOPHER COLUMBUS LANGDELL, *SELECTION OF CASES ON THE LAW OF CONTRACTS* (1871).

¹⁶ See David L. Schwartz and Lee Petherbridge, *The Use of Legal Scholarship by the Federal Courts of Appeals: An Empirical Study*, 96 CORNELL L.REV. 2011 (currently available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1640681). The authors’ exhaustive statistical study show that Chief Justice Roberts is factually wrong. In fact, the rate of scholarship citation in legal opinions has steadily increased since the 1960s.

forward looking (rational expectations) theory of value, which is much less stable, and breaks apart into radically different views about the state and the market as social institutions. As a result it has gyrated between differing political ideologies, and each of these in turn has proven quite vulnerable to critique and change from within the neoclassical system. Neoclassicism has a right wing and a left wing that are both completely driven by marginalist principles. Indeed, some very prominent neoclassicists, such as Alfred Marshall, Arthur Cecil Pigou or Joan Robinson in England, or Richard T. Ely or John R. Commons in the United States, flirted with socialism. Classicism never embraced such diversity.

As a result, yes, it does seem that we are experiencing a formalist period today, at least on the Supreme Court and in many legislative bodies. However, formalism today is not signaling the impending death of neoclassicism in the way that legal formalism a century ago came about just as the classical model was falling apart. After all, Justice Roberts' critics are mainly neoclassical as well; they simply come from a different room in the neoclassical tent.

PROGRESSIVE LEGAL POLICY AND THE MARGINALIST REVOLUTION

The Marginalist Revolution

Marginalism in economics is a theory that equates value with the next choice to be made. A rational person chooses first what she wants most, second what she wants second-most, and so on. The analogue of marginalism in philosophy is utilitarianism. While utilitarianism was developed to a very high degree in the late eighteenth century, it did not penetrate political economy for another century. For example, Jeremy Bentham wrote about declining marginal utility and use of utility as a behavioral constraint, already in the late eighteenth century.¹⁷ But classical political economy from

¹⁷ See JEREMY BENTHAM, *THE PHILOSOPHY OF ECONOMIC SCIENCE* (c. 1793):

The quantity of happiness will not go on increasing in anything near the same proportion as the quantity of wealth:--ten thousand times the quantity of wealth will not bring with it ten thousand times the quantity of happiness. It will even be matter of doubt, whether ten thousand times the wealth will in general bring with it twice the happiness. The effect of wealth in the production of happiness goes on diminishing, as the quantity by which the wealth of one man exceeds that of another goes on increasing: in other words, the quantity of happiness produced by a particle of wealth (each particle being of the same magnitude) will be less at every particle; the second will produce less than the first, the third than the second, and so on."

Reprinted in 1 WERNER STARK, *JEREMY BENTHAM'S ECONOMIC WRITINGS: CRITICAL EDITION BASED ON HIS PRINTED WORKS AND UNPRINTED MANUSCRIPTS* 113 (1952). See also JEREMY

Adam Smith through John Stuart Mill went about the study of economic value mainly by looking at historical averages. For example, the value of market goods was thought to be a function of the average cost of production. The value of wages was thought to be a function of previous capital accumulation divided by the number of workers (the "wage fund" theory).¹⁸ Indeed, Mill himself managed to be utilitarian in his philosophical theory but classical in his economic theory, and began to see value in applying utilitarianism in economics very late in his life. Before the theory of marginal utility could become central to economics it had to be recast as a theory about how market prices are determined and about the relationship between marginal utility (or value) and the amount of something that is produced. That is, utilitarianism had to migrate from its traditional position in ethics and political philosophy into the theory of exchange and market behavior.

Beginning in the 1870s, economists in both England and the Continent began to merge utilitarianism into economics by seeing value in terms of an economic decision maker's willingness to pay for the next unit.¹⁹ Cost was important in determine whether someone would produce and how much, but it did not determine value. The result was stunning, leading to the division between "classical" and "neoclassical," and also between the "political economy" of Adam Smith and his disciples, and the far more mathematical "economics" of the turn of the twentieth century.²⁰ On a perspective line, the classicists and the marginalists stood back to back, the former always looking for a theory of value based on averages taken from the past, the latter always identifying value with rational expectations and the next thing.

BENTHAM, *PRINCIPLES OF THE CIVIL CODE*, Part 1, Ch. 6 (first published 1802) (explaining declining marginal utility of wealth and marginal deterrence).

¹⁸ See HERBERT HOVENKAMP, *ENTERPRISE AND AMERICAN LAW, 1836-1937*, at 193-199 (1991)

¹⁹ By common belief William Stanley Jevons (England), Carl Menger (Austria) and Leon Walras (Switzerland) arrived at modern marginalism roughly simultaneously and also independently. Whether they actually did so and the extent to which marginalism appeared earlier are widely debated. See MARK BLAUG, *ECONOMIC THEORY IN RETROSPECT* 277-310 (5th ed. 1996). Schumpeter's biased but brilliant account traces its origins mainly to Cournot and numerous lesser authors who wrote in the first half of the nineteenth century. See JOSEPH A. SCHUMPETER, *HISTORY OF ECONOMIC ANALYSIS* 463 (1954). Among the earliest American marginalists were John Bates Clark (Columbia), Irving Fisher (Yale), Francis Amasa Walker (Yale), and Simon Newcomb (Johns Hopkins, mathematics).

²⁰ A term popularized by the Marshalls in 1879. See ALFRED MARSHALL AND MARY PALEY MARSHALL, *THE ECONOMICS OF INDUSTRY* (1879). See Lionel Robbins Richard T. Ely lecture, "Economics and Political Economy," 71 *AM.ECON.REV.* 1 (May, 1981).

Marginalism invited many new concepts into economics, some almost immediately and some that took several decades to develop. Most of them also invited far greater use of both mathematics and, eventually, empirical observation. The most important new concept was that if marginal utility declines rational decision makers will equate utilities “at the margin.” That is, if people are not able to procure an infinite amount of everything they will purchase each good they want until the marginal utility of all are equal. For a simple illustration, suppose a person values bread by 10 for the first loaf, 9 for the second loaf, 8 for the third, and so on. She also values meat by 8 for the first pound, 6 for the second pound, 4 for the third pound, and so on. This person will acquire bread and meat in some unknown amount (depending on her utility for all goods) until the utilities of the two are the same. For example, having three loaves of bread and no meat, the marginal utility of the fourth loaf of bread would be 7; the marginal utility of the next (i.e., the first) pound of meat, would be 8. At this point adding a loaf of bread would produce 7 units of increased utility while the meat will produce 8. Having acquired the first pound of meat, however, the marginal utility of the next pound would be 6, while bread is still 7. In “equilibrium,” a steady state in which all purchases have been made, the marginal utility of all goods in this purchaser’s basket would be precisely the same.

The second concept, which served to distinguish British utilitarianism from marginalist economics, is that marginal utility theory provides a theory of market prices and production, something that classical economy had not been able to do. Under marginalism the value (willingness to pay) of each additional unit drops as buyers move from higher to lower positions on their utility curve. That is, demand curves slope downward. On the other side, “supply” moves upward. Producers maximizing their own utility produce at the lowest cost first, starting out with their most efficient fields and factories, and moving to less efficient resources as demand increases. For example, suppose a farmer has good, average, and poor fields with production costs of 6, 8, and 10, respectively. If the anticipated market price is 9, the farmer will produce from the first two fields but not the third. The market will be in “equilibrium” when the very last good is produced at a cost just equal to the very last buyer’s willingness to pay. Thus “price equals marginal cost” in a competitive market.

The third concept, which took decades to develop, is that while people and firms are both economic actors, their choices are different in one important sense. While both are “rational,” people maximize utility while firms maximize profits. Profits can be measured by a metric such as dollars or pounds, which is both “cardinal,” in the sense that the unit of measurement is constant and weighted (\$10 will buy ten times as much as \$1), and comparable among different actors, which means that a dollar in the hands of one firm is worth the same as a dollar in the hands of another. These twin facts of cardinality and inter-actor comparability means that we can derive strong theories about whether practices are efficient (value maximizing), what are the effects of dollar transfers, and the like.

In contrast, biological persons maximize “utility,” a purely *private* standard that does not provide a particularly useful unit of measurement. To be sure, greater wealth

may entail greater utility, and vice-versa. But there is no reason for thinking that the relationship is cardinal. Twice as much wealth might bring ten times as much utility, or perhaps barely any increment at all. Further, different people cannot be assumed to have identical utility functions. They can have very different preferences for goods and even different preferences for dollars. “Ordinalism,” which came to dominate neoclassical economics after the 1930s, was the extremely pessimistic view that people’s true utility functions could never be quantified because they cannot be observed. As a result, drawing broad conclusions about such issues as involuntary wealth redistribution lay “outside the boundaries” of economic science.²¹

One consequence of this difference is that marginalism became much more potent in business economics than it ever had been in political and ethical theory. The earlier utilitarians largely knew that utilitarianism did not provide a calculus for comparing one person’s utility with that of another, and this served to limit the conclusions that could be drawn about social as opposed to individual values. By contrast, business firms maximize profits and trade dollars, and the interpersonal comparison problem largely goes away.

One result of the interpersonal comparability issue was the emergence of two broad subdivisions in neoclassical economics. One, historically called “industrial economics” (today, more commonly, “price theory” and “industrial organization”) was concerned mainly with business firms and the movement of some constant currency such as dollars. The other, “welfare economics,” was concerned mainly with the efficacy of markets as devices to increase human utility, and also with the various mechanisms by which utility can be observed or social choices can be made through nonmarket means.

These fundamental differences between classicism and neoclassicism in economics rather quickly became blended into legal thought. For example, in classicism value was a function of invested costs. For a neoclassicist value is a function of willingness to pay, which was driven by expectations about performance in the future. Because of its backward view, classicism tended to see markets and rules as self-defining and self-executing. For example, historical cost is what it is. By contrast, marginalists tended to see value in terms of rational expectations. While this was much more realistic for many purposes, it was also subject to more assumptions, more speculation, and thus more manipulation. As a result, marginalists early on saw a much broader role for a regulatory state than the classicists did. It is no coincidence that the first generation of marginalists were mainly the Progressives, and the second generation were mainly the parents of the New Deal.

While classicists were individualists on questions about social ordering, marginalists divided on the question, and liberals accepted a concept of “social” as well as individual utility. More fundamentally, because of its backward looking perspective

²¹ See Chap. 8.

classicism tended to see value as part of nature and as beyond anyone's power to alter in fundamental ways. In sharp contrast, for neoclassicists value was a function of human desire. Neoclassical theory was thus far more subjective and thus often attacked by its critics of being hedonistic.²²

In both economics and law the immediate impact of marginalist thinking was serious doubts about the robustness of markets and purely private ordering through exchange, and a correspondingly greater confidence in the state as regulator. Marginalist economists gradually began a "reconstruction" period, however, that led to more robust or at least more workable theories of competition, and also an interest group theory that served to explain that government regulation was both more costly and less productive than the earlier maginalists had thought. This set of developments took about a half century. Its culmination was in the 1960s, with the publication of Coase's "Problem of Social Cost" in private economics and common law policy (1960). 1965 saw the publication of Mancur Olson's Jr., *The Logic of Collective Action*, on the political process and the theory of interest groups; James M. Landis' pessimistic *Report on Regulatory Agencies to the President-Elect* (1960) very largely undercut the optimism about government regulation reflected in his own progressive 1938 book *THE ADMINISTRATIVE PROCESS*. By the late 1970s the federal government began to oversee the dismantling of much of the New Deal regulatory state.

Finally, marginalism brought about a change in both economic and legal conceptions of "coercion." Classical political economy had recognized two states: competition and monopoly, and monopoly almost never existed unless the state created an exclusive right.²³ Under competition, by contrast everything and everyone moved freely. By contrast, marginalism saw competition as existing in degrees, and mobility as limited to the same extent. Beginning with Pigou and later with Coase, economists began to emphasize the "costs of movement" (Pigou) or "transaction costs" (Coase) of getting things or people from one spot to the next. Economics formed theories about high fixed costs, market concentration and economies of scale, barriers to entry, access to capital, and the costs of resource movement that could lead to forms of "market coercion" as opposed to state-imposed coercion. One did not need exclusive grants of privilege from the state in order to coerce.²⁴ In the late 1920s Robert L Hale, an

²² See *SOCIALISM AND MARGINALISM IN ECONOMICS: 1870-1930* (Ian Steedman, ed., 1995).

²³ However, the classicists even going back to Adam Smith had at least a limited conception of natural monopoly, or of markets that are most efficiently served by a single firm. See ADAM SMITH, *THE WEALTH OF NATIONS*, Book V, ch. 1.121 (suggesting that insurance, banking, municipal water supply and canals fell into this category). John Stuart Mill's conception was much more sophisticated; he argued at some length for exclusivity in the provision of public utilities such as gas and water works. JOHN STUART MILL, *PRINCIPLES OF POLITICAL ECONOMY, WITH SOME OF THEIR APPLICATIONS TO SOCIAL PHILOSOPHY*, Book I, Chap. 9.1 (1848).

²⁴ HERBERT HOVENKAMP, *ENTERPRISE AND AMERICAN LAW* 200 (1994)

important forerunner of Legal Realism, applied these ideas to legal institutions by evaluating the coerciveness of a state policy that did no more than protect property and contract rights.²⁵ Today Hale's work is regarded as one of the great achievements of early legal realism.

Marginalism and Darwinism

The two most important scientific ideas of the nineteenth century were Darwinism and marginalism. Both became starting points for the great revolution in the social sciences that took place in the 1870's and later. The central principle of Darwinism was the theory of evolution by natural selection. Nature produces many more offspring than the environment is able to accommodate. As a result, individuals must compete to survive. Those who have inherited characteristics that give them a competitive advantage tend to live long enough to have offspring. They pass these characteristics on to future generations, who then continue the struggle.

The starting point for Darwinian analysis of the human individual was the environment. Both the human organism and her behavior were a product of the environment, shaped over many generations. Its choices were determined entirely by surroundings. By contrast, marginalism began with the human as an autonomous decision maker.

Darwinism is mainly an empirical concept. Darwin developed the theory of natural selection after many years of scientific observation, and his famous work *On the Origin of Species* (1859) attempted to prove its truth by overwhelming the reader with empirical evidence. By contrast, marginalism is an analytic concept. Indeed, it cannot be "verified" at all. We can observe choices but not states of mind.

Nevertheless, there is no inherent conflict between Darwin and marginalism. Early American social scientists such as Edward A. Ross viewed them as complementary rather than competing models of human behavior. One can readily imagine a unified conception of behavioral science in which evolutionary theory addressed issues about the formation of human motives and preferences, and marginalist mathematics rationalized the way they are asserted, and also developed models of business firm behavior. What actually developed was something far different. Darwinian scientists after the World War I developed models in which human action was seen as nothing more than a consequence of evolution and response to the environment. They emphasized that the successful individuals in a particular

²⁵ Robert L. Hale, *Coercion and Distribution in a Supposedly Non-Coercive State*, 38 POLITICAL SCIENCE Q. 470 (1923).

environmental niche tend to have common characteristics and reactions. Variations were random and most led to an early death, although a few increased the odds of survival. With Darwin's *The Descent of Man* (1871) and the development of Darwinian anthropology these views were extended to individual choices and common social practices.²⁶ Indeed, the behaviorist psychology that developed around the time of World War I believed that the concepts of choice and even consciousness were scientifically meaningless.²⁷

Thus Darwinians tended to believe humans had no choice about preferences; they were built in as part of the instinct to survive. The principal difference between human beings and the simplest lower organisms is that humans have the power to reflect about preferences. This led many progressive social scientists to believe that the state could make "objective" welfare judgments based on external criteria such as health or education. Darwinism told the progressive, whether economist, psychologist or other social scientist, that basic human needs and desires were determined principally by the environment. Further, the things we call "preferences," at least at some level, were those things necessary for survival. The structure of human preference was a product of evolution just as much as his straight spine and his cognitive abilities. As a result, one could discern preferences by studying human evolution or even the environment itself. For the so-called "Reform Darwinists" (as opposed to the Social Darwinists) this model permitted Progressive era economists to speak of "social" as well as individual wants.²⁸

In sharp contrast, neoclassicists increasingly came to think that human beings asserting preferences were acting autonomously. By the 1930s and after, marginalist economists did not purport to care about where preferences came from, but took them as given. The entire enterprise of trying to find a common structure that linked the

²⁶Most prominently in LEWIS HENRY MORGAN, *ANCIENT SOCIETY* (1877). See GEORGE W. STOCKING, JR., *RACE, CULTURE, AND EVOLUTION: ESSAYS IN THE HISTORY OF ANTHROPOLOGY* (1968).

²⁷E.g., JOHN B. WATSON, *BEHAVIORISM* 3 (1924; quotation from 1998 reprint edition). See WILLIAM M. BAUM, *UNDERSTANDING BEHAVIORISM: BEHAVIOR CULTURE, AND EVOLUTION* (2d ed. 2004). For a good historical survey, see ROBERT BOAKES, *FROM DARWINISM TO BEHAVIOURISM: PSYCHOLOGY AND THE MINDS OF ANIMALS* (1984).

²⁸E.g., FRANKLIN HENRY GIDDINGS, *THE THEORY OF SOCIOLOGY* (1894); *THE THEORY OF SOCIALIZATION* (1897); LESTER FRANK WARD, *NEO-DARWINISM AND NEO-LAMARCKISM* (1891); LESTER FRANK WARD, *THE PSYCHIC FACTORS OF CIVILIZATION* (1893); LESTER FRANK WARD, *GLIMPSES OF THE COSMOS: A MENTAL AUTOBIOGRAPHY* (6 vols. 1913-1918).

preferences of different individuals together was not within economic science. Indeed, neoclassical ideas about choice became ever more stripped down until the only qualities that could be ascribed to them is that they must be capable of being asserted over the entire relevant range and that they must be rational, or transitive.²⁹

In sum, to a very large extent economics and the Darwinian social sciences each adopted scientific methodologies that tended to regard the methodology of the other as unscientific. Further, lurking behind all of this was the nature-nurture controversy, in which Darwinism historically was seen as strongly supporting nature, while marginalists were really not interested in nature, but only in the assertion of individual human choice. Marginalism became the perfect vehicle for nurture based theories of social control.

Darwinism has had a much more important role than marginalism in the writing of intellectual history, including legal history. For example, marginalism has no equivalent of Richard Hofstadter's *Social Darwinism in American Thought* (1944), one of the most famous books of United States intellectual history of all time. Evangelical ministers in the first half of the twentieth century did not preach sermons attacking marginalism they way they did Darwinism, even though marginalism produced just as many threats to historical Christian principles. Of course, the thing that gave Darwinism its notoriety was the thesis that humankind descended from lower primates, a heresy that marginalism's hedonism could not match in the evangelical outrage that it produced.³⁰

Darwinism and marginalism had a common starting point: scarcity in relation to the population. Indeed both claimed the classical political economist Sir Thomas Malthus' as an intellectual parent.³¹ Darwin's theory of survival was entirely driven by the proposition that nature produces many more organisms than the environment is

²⁹The "range" condition states simply that the actor must be capable of asserting preferences over the full range of alternatives that are available. The transitivity condition states that if an actor prefers A to B and B to C, then she must also prefer A to C.

³⁰ Most of the perceived threat to Christianity came, not from *ON THE ORIGIN OF SPECIES*, but rather *THE DESCENT OF MAN* (1871), published a dozen years later and arguing the human had evolved from lower primates. Thus the "Monkey Trial" of 1925. See *John Scopes v. State*, 1 Smith (TN) 105, 289 S.W. 363 (Tenn. 1927) (reversing criminal conviction on technical ground that trial judge failed to follow statutory procedure that required jury to set the fine, although the court took some pains to declare that the anti-evolution state was constitutional).

³¹ See THOMAS R. MALTHUS, *AN ESSAY ON THE PRINCIPLE OF POPULATION* (1798); THOMAS R. MALTHUS, *PRINCIPLES OF POLITICAL ECONOMY* (1820). On Malthus influence on Darwin, see JANET BROWNE, *CHARLES DARWIN: VOYAGING, A BIOGRAPHY* 385-390 (1995).

able to support. As became most apparent in the work of Lionel Robbins, neoclassical economics was a theory about how people make choice in a world of scarce resources which have alternative possible uses.³²

Darwinism and Marginalism developed profoundly different views about social control. For Darwinists (both Social and Reform) the human individual is largely what he is at birth; one can improve the species through cultivation, but not the individual.³³ By contrast, for the marginalists reforming behavior was always about governing incentives at the margin. For example, a Darwinist would address the problem of criminal behavior by seeking out genetic traits that were thought to signal it and using sterilization or other methods to prevent these individuals from reproducing.³⁴ These views were readily extended to race, although in the United States they showed up not as an argument for mass sterilization but rather for prohibitions on interracial marriage.³⁵ By contrast, marginalists applied penalties and rewards to living individuals in order to create incentives. For a period of time during the Progressive Era both of these methods were widely practiced, but the marginalist view eventually won out.

United States Constitutional doctrines such as substantive due process have widely been believed to be an expression of Social Darwinism in the United States. That is how the intellectual history during the period 1930-1970 portrayed them,³⁶ and

³² See LIONEL ROBBINS, AN ESSAY ON THE NATURE & SIGNIFICANCE OF ECONOMIC SCIENCE 55 (2d ed. 1935) (defining economics as “the science which describes human behaviour as a relationship between ends and scarce means which have alternative uses”).

³³ Lamarckians, in contrast to Darwinians, believed in the “inheritance of acquired characteristics,” or the view that a parent could learn something and pass it on to offspring. Lamarckianism experienced a brief revival in the United States in the 1920s. See Rachel F. Baskerville, *Icons of Repute: The Attribution of Lamarckian and Darwinian Evolutionary Mechanisms in Economics* (SSRN 2007).

³⁴ E.g., AUGUST DRAHMS, THE CRIMINAL (1900); RICHARD L. DUGDALE, THE JUKES: A STUDY IN CRIME, PAUPERISM, DISEASE AND HEREDITY (1877).

³⁵ See, e.g., EUGENE S. TALBOT, DEGENERACY: ITS CAUSES, SIGNS AND RESULTS 99-103 (1904) (discussing negative evolutionary effects of racial mixing); W.A. Dixon, *The Morbid Proclivities and Retrogressive Tendencies in the Offspring of Mulattoes*, 20 J. A.M.A. 1 (1893).

³⁶ In addition to Hofstadter’s *Social Darwinism*, see, e.g., HENRY STEELE COMMAGER, JR., THE AMERICAN MIND: AN INTERPRETATION OF AMERICAN THOUGHT AND CHARACTER SINCE THE 1880s (1950); MORTON G. WHITE, SOCIAL THOUGHT IN AMERICA: THE REVOLT AGAINST FORMALISM (1949).

the idea still claims occasional supporters. Nothing could be further from the truth, however. The authors of *Lochner* (Rufus Peckham), *Adkins* (George Sutherland), the Four Horsemen (Justices Sutherland as well as VanDevanter, Butler & McReynolds) were not Social Darwinists and, for that matter, probably not Darwinists at all. The origins of Substantive Due Process lay entirely in classical political economy.³⁷ This strong view of liberty of contract from state interference gave way to marginalist liberal views in the 1930s, but gradually returned to Constitutional jurisprudence in the 1960s and after, as the neoclassical model became more favorably inclined toward markets and less favorable toward government intervention. Liberty of contract is fundamentally an economic, not an evolutionary, doctrine.

Law and Economics During the Age of Material Welfare

The initial consequence of the adoption of marginalism in economics was a shift in policy concern to two things: the regulation of incentives and distributive justice. Another consequence, equally profound, was a steep decline in the status of the market as a wealth allocation device. Following Alfred Marshall, the marginalists adopted their scientific principles from mechanics and were obsessed with the way that trading moved toward an "equilibrium" in which maximum wants were satisfied. This search for the conditions of equilibrium found many impediments that seemed to cry out for government intervention. As a result, many prominent British marginalists prior to the 1930s became socialists and at least one, Cambridge University Professor Joan Robinson, flirted with Marxism.³⁸ Many American marginalist economists during the Progressive Era developed a profound distrust in markets to allocate resources properly

In the United States the first three decades of the century produced a spate of books and articles on the relationship between economic science and the law, and a surprising number of legislative responses. In general, the members of this first law and economics movement were much more enthusiastic about legislation than the members of the post-sixties movement that we today identify by the term "law and economics." The earlier group tended to believe that market failure was widespread, thus justifying government intervention, and that the state could increase welfare by transferring wealth from wealthier to poorer members of society.³⁹

³⁷ HOVENKAMP, ENTERPRISE AND AMERICAN LAW, *supra*, 171-206; Herbert Hovenkamp, *The Political Economy of Substantive Due Process*, 40 STANFORD L. REV. 379-447 (1988).

³⁸ See Fletcher Baragar, *Joan Robinson on Marx*, 15 Rev.Pol.Econ. 467 (2003).

³⁹ See Herbert Hovenkamp, *The First Great Law and Economics Movement*, 42 STAN. L. REV. 993 (1990).

Individual vs. Social Welfare: Criminal Law, Tax Policy, and Race

Marginalism as an economic theory showed up in Progressive Era legal policy in many ways. Among the most important were the adoption and use of deterrence theories in criminal law, the use of a graduated income tax and differential taxation as a wealth redistribution device, and somewhat later, increasingly benign attitudes about race.

On tax policy, the use of a graduated income tax was an exercise in the pure mathematics of marginalism. In particular was the Progressive concern that if taxes on the wealthy were not allocated in the right way they would simply be passed on to the poor through the price system. For example, a sales tax is typically assessed against sellers, who normally add it to the price of the sale. Edwin R.A. Seligman was the Progressive Era champion of the economics of passing on ("shifting") and identifying the social group upon whom a tax burden ultimately fell ("incidence").⁴⁰ Seligman's views rested on the premise that total welfare could be increased by shifting resources from the wealthy to the poorer, a proposition that much of neoclassical economics came to reject in the 1930s and later.

The story of marginalism and race is more complex because genetics played such an important role in race theory in the United States prior to the New Deal. Indeed, the extent to which Progressives could be quite interventionist in behalf of the poor but also so thoroughly racist is discomfiting.⁴¹ Indeed, in an important sense Progressive Era racism was far worse than racism in a more laissez faire economy, because explicit racism incorporated into programs for social engineering.

Revisionism in Torts, Contract and Property

The term "common law" needs to be qualified when speaking of the twentieth century. Many of the revisions were statutory.

Tort theory was very poorly developed prior to the middle of the nineteenth century, largely because it lacked focus, something that the rise of negligence theory

⁴⁰ See, e.g., EDWIN R.A. SELIGMAN, ON THE SHIFTING AND INCIDENCE OF TAXATION (1892). For modern applications, see Sarah B. Lawsky, *On the Edge: Declining Marginal Utility and Tax Policy*, 95 MINN.L.REV. 904 (2011).

⁴¹ E.g., Edward A. Ross (Progressive sociologist), *The Causes of Race Superiority*, 18 ANNALS AM. ACAD. POL. & SOC. SCI. 67, 67-89 (1901); G. Stanley Hall (Progressive psychologist), *The Negro in Africa and America*, 12 PEDAGOGICAL SEMINARY 350 (1905); John R. Commons (Progressive economist), *RACES AND IMMIGRANTS IN AMERICA* (New York, 1907); Franklin H. Giddings (Progressive psychologist), *THE PRINCIPLES OF SOCIOLOGY* 328 (New York, 1896).

provided.⁴² But Shearman and Redfield's treatise on negligence was not published until 1869, and Holmes's unifying essays on tort theory came yet later.⁴³ Holmes' objective theory ("external standard") reflected pure marginalism in tort law. In largely Benthamite fashion, Holmes argued that the law is not concerned with mental states but rather with regulation of conduct, and that penalties should be adjusted in order to provide incentives or disincentives to certain types of conduct. As a result, it should meter penalties according to the foresight of the hypothetical reasonable person. Holmes' principal objection to strict liability was that it did not fit into a utilitarian framework. In his view, liability without fault did not provide appropriate incentives.⁴⁴ The revival of strict liability in products cases in the 1940s⁴⁵ came about mainly after commentators began to see that strict liability can in fact be quite effective at creating appropriate incentives in certain contexts, such as when a manufacturer controls its entire production process (making negligence virtually impossible to prove), strict liability requires a firm to internalize its costs, and that the costs themselves can be distributed across the market in the form of insurance.

One significant marginalist development in tort theory was the displacement of the classical theory of scientific causation with foreseeability, leading some Legal Realists to complain that negligence and causation (or at least proximate cause) were being governed by the same test.⁴⁶ Marginalist tort law came to be dominated by a marginal deterrence theory that forced actors to internalize the foreseeable harmful consequences of their actions. That theory served to explain intentional torts, negligence of all degrees, and strict liability. It was encapsulated in Judge Hand's articulation in *Carroll Towing* that an action is negligent if the anticipated cost of taking a precaution is less than the expected harm caused by the accident. In other words, negligence consists in a failure to take cost justified precautions, measured *ex ante*.⁴⁷

⁴² In the United States, *Brown v. Kendall*, 60 Mass. (6 Cush.) 292 (1850) (Chief Justice Lemuel Shaw, adopting a negligence interpretation of writ of trespass on the case).

⁴³ THOMAS G. SHEARMAN & AMASA REDFIELD, A TREATISE ON THE LAW OF NEGLIGENCE (1869); Oliver W. Holmes, Jr., *A Theory of Torts*, 7 AM.L.REV. 652 (1873); Oliver Wendell Holmes, Jr., *Privilege, Malice, and Intent*, 8 HARV.L.REV. 1 (1894); OLIVER WENDELL HOLMES, JR., THE COMMON LAW (1881).

⁴⁴ On Holmes's Marginalism, see Herbert Hovenkamp, *Knowledge about Welfare: Legal Realism and the Separation of Law and Economics*, 84 MINN.L.REV. 805 (2000).

⁴⁵ E.g., *Escola vs. Coca-Cola Bottling Co. of Fresno*, 24 Cal. 2d 453, 150 P.2d 436, 441 (1944) (Traynor, J., concurring).

⁴⁶ Leon Green, *Are Negligence and "Proximate" Cause Determined by the Same Test*, 1 TEX. L. REV. 224, 423 (1923)

⁴⁷ *United States v. Carroll Towing, Inc.*, 159 F.2d 169 (2d Cir. 1947).

The Second Restatement of Torts (mainly, 1970s), largely restated tort law in terms of management of perceived risks.

The marginalist revolution in contract law consisted mainly in the rejection of a “will” or subjective “meeting of the minds” theory of contract and its replacement by an objective, or “external” standard (Holmes and Williston).⁴⁸ But the rise of objectivism carried with it a realization that contract interpretation no longer depended on the subjective will of the parties, but rather on objective constructs that were inevitably normative in character. Just as an objective standard for negligence in tort law led to normative standards (“loss minimizing”), so too objective standards in contract led to normative standards that included both the facilitation of ordinary transactions and a growing sense that coercion, as the Legal Realists used that term, could be present even in voluntary exchange. The inevitable result was that contract law developed a greater sensitivity to inequality of bargaining position and duress.⁴⁹

The other thing that happened in contract law, and that was more explicitly driven by industrial economics, was the displacement of the classical theory that a contract is an event that occurs at a single instant in time.⁵⁰ The rise of more complex distribution systems and the increased appreciation of the role of transaction costs and specialization of trading partners led to increased accommodation of contractual agreements of longer duration and with more complex and open ended terms. The result was the development of a “neoclassical” theory of contract that acknowledged a larger variety of arrangements, and with less formality, as contractual.⁵¹ Equally important from a business point of view was the rise of the long-term “relational” contract, which contemplated far more open-endedness. For example, Samuel Williston wrote this in his 1920 treatise on contracts:

A promise to buy such a quantity of goods as the buyer may thereafter order, or to take goods in such quantities “as may be desired,” or as the buyer “may want” is not sufficient consideration since the buyer may refrain from buying at his option and without incurring legal detriment himself or benefiting the other party. A few courts additionally held the contracts invalid if they did not require the buyer to take exclusively from the seller, because then the buyer could effectively stay in business but purchase nothing. By contrast, others enforced

⁴⁸ SAMUEL WILLISTON, *THE LAW OF CONTRACTS* (1920).

⁴⁹ E.g., ARTHUR L. CORBIN, *CORBIN ON CONTRACTS* (1950).

⁵⁰ The topic is developed more fully in the chapters on competition policy and vertical integration.

⁵¹ Ian R. Macneil, *Contracts: Adjustment of Long-Term Economic Relations Under Classical Neoclassical, and Relational Contract Law*, 72 NW. U. L. REV. 854 (1978).

the contracts when they did in fact require the buyer to take all of its requirements from the seller.⁵²

Within a few decades, however, courts routinely enforced not only exclusive dealing contracts that did not specify the quantity, but even long-term franchise contracts that permitted the price, the quantity, and even the goods to be sold to be subsequently specified by the franchisor. The contract had become a substitute for the vertically integrated firm.⁵³

Real property became by far the most comprehensively regulated land use market prior to the New Deal. The land use regulation upheld by the Supreme Court in the *Euclid* case in 1926 specified uses, heights, and densities with respect to construction on privately owned land. It was also jurisprudentially anomalous because the Supreme Court permitted comprehensive zoning to go forward in an era in which it was striking down all types of regulation. Justice Sutherland, who found regulation of minimum wages for women to be beyond the state's police power, believed that urban land was persistently subject to market failure, a distinctly neoclassical notion, making regulation acceptable.⁵⁴ That case set the stage for a great debate over the efficacy of private bargaining as opposed to government regulation in land use. Fundamentally, the law and economics movement originated in a dispute that was heavily about using the market driven common law of nuisance rather than regulatory intervention in order to control harmful land uses.⁵⁵

Institutionalism, Legal Realism, and Democratic Government

Market Failure, Constitutional Interpretation, and Administrative Law

One characteristic of formalism is confidence – one might even say arrogance—about an established model. There are no big pieces left to be filled in, but only details. That describes the relationship between classical political economy and *Lochner*.

⁵² WILLISTON, CONTRACTS §104 (1920).

⁵³ Herbert Hovenkamp, *The Law of Vertical Integration and the Business Firm, 1880-1960*, 95 IOWA L.REV. 863 (2010).

⁵⁴ See *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926) (Sutherland, J., upholding comprehensive land use planning); *Adkins v. Children's Hospital*, 261 U.S. 525, 545 (1923) (Sutherland, J., striking down minimum wage statute applying to women because “the right to contract about one's affairs is a part of the liberty of the individual protected by the due process clause.”).

⁵⁵ Ronald H. Coase, *The Problem of Social Cost*, 3 J.L.& ECON. 1 (1960).

An important characteristic of marginalism, however, was renewed doubt about the efficacy of markets and the propriety of government intervention. By the 1930s marginalist economics had produced significant theory suggesting that markets are in fact feeble instruments, easily manipulated and subject to a great deal of coercion in the presence of private economic power.⁵⁶ The theory also suggested, however, that markets differed significantly from one another, and that there was no single right answer to problems of market failure.

In Constitutional adjudication of economic regulation, the result was a complete loss of confidence in the classical proposition that markets, left untouched, were robust, and that regulation was highly likely to be little more than a favor paid to a special interest group. A regime that favored experimentation necessarily deferred much more heavily to legislative judgments about the proper regulatory approach, and administrative law promised a value mixture of expertise, quasi-legislative power, and quasi-judicial authority.⁵⁷

Institutionalism and Legal Realism

The Institutionalists were a group of economic dissidents who worked mainly in the United States from the beginning of the twentieth century (Thorstein Veblen) until the New Deal. Some of them, such as Veblen, opposed marginalist analysis. Others, including John R. Commons and John Maurice Clark, were enthusiastic marginalists. What they all shared however, was early marginalism's distrust of markets, the notion that economic analysis should examine economic decision making in very small markets (e.g., firms, families, local governments), and a fairly heady optimism about government regulation as a corrective.⁵⁸

The Legal Realists were, in essence, the legal branch of Institutionalism. Indeed, many of the Realists crossed over between law and economics, but the economics that

⁵⁶ In England, see, e.g., JOAN ROBINSON, *THE ECONOMICS OF IMPERFECT COMPETITION* (1933); in the United States, EDWARD CHAMBERLAIN, *THEORY OF MONOPOLISTIC COMPETITION* (1933). Others are discussed in the chapters on competition policy.

⁵⁷ E.g., Charles E. Clark, *Fact Research in Law Administration*, 2 CONN. B.J. 833 (1931); Roscoe Pound, *Courts and Legislation*, 7 AM.POL.SCI.REV. 361 (1915) William O. Douglas & J. Howard Marshall, *A Factual Study of Bankruptcy Administration and Some Suggestions*, 32 COLUM.L.REV. 25 (1932).

⁵⁸ A good example concerning Progressive economics and the common law is political economist Richard T. Ely's *PROPERTY AND CONTRACT IN THEIR RELATIONS TO THE DISTRIBUTION OF WEALTH* (1914).

they embraced was invariably a form of institutionalism.⁵⁹ Once the impact of the ordinalist revolution in economics set in, their economic theory became largely regarded as obsolete. Further, once the theory of perfect competition and market failure became formalized their views about regulation came to be regarded as obsolete as well.

These facts are key to understanding the place of Legal Realism in American legal thought. Today, some people regard them as early proponents of law and economics, while others think of them as strongly hostile. The fact is that they were proponents of a kind of law and economics, but their thought coincided with a particular type of economic reasoning, institutionalism, that was relatively short lived and did not survive the reconstruction of a much more market based neoclassicism that began after World War II.

Ordinalism and the Human Production Function

"Ordinalism," or the ordinalist revolution, originated mainly at the London School of Economics in the early to mid-1930s, although many other economists had recognized the issue. The ordinalist revolution created a sharp divide within neoclassical economics that had immediate, powerful implications for legal policy making of all kinds. Marginalists up to the 1930s believed with various degrees of confidence that the principle of "equality at the margin" (see Chapter 1) applied *across* persons, not merely to an individual's personal choices. Indeed, if everyone had identical utility functions welfare would be maximized when everyone had exactly the same amount of utility. But of course people have different preferences, and that raised the issue of how utilities can be compared across persons.

Relying heavily on logical positivism and the writings of the Vienna Circle, Lionel Robbins developed what became the dominant view, which was that because subjective mental states regarding utility cannot be observed in any sense that permits interpersonal comparison, no scientific conclusions could be drawn about them. Robbins wrote:

... suppose that we differed about the satisfaction derived by A from an income of 1,000, and the satisfaction derived by B from an income of twice that magnitude. Asking them would provide no solution. Supposing they differed. A

⁵⁹ E.g., Walton Hamilton, *Institutional Approach to Economic Theory* The, 9 AM.ECON.REV. 316 (May 1919); Walton Hamilton, *Law and Economics*, 19 AM.ECON.REV. 56 (1929); Karl Llewellyn, *The Effect of Legal Institutions upon Economics*, 15 AM.ECON.REV. 665 (1925); Robert L. Hale, *Bargaining, Duress and Economic Liberty*, 43 COLUM.L.REV. 603 (1943); William O. Douglas, *A Functional Approach to the Law of Business Associations*, 23 ILL.L.REV. 673 (1929); Underhill Moore & Theodore S. Hope, Jr., *An Institutional Approach to the Law of Commercial Banking*, 38 YALE L.J. 703 (1929);

might urge that he had more satisfaction than B at the margin. While B might urge that, on the contrary, he had more satisfaction than A. We do not need to be slavish behaviourists to realise that here is no scientific evidence. There is no means of testing the magnitude of A's satisfaction as compared with B's. If we tested the state of their blood-streams, that would be a test of blood, not satisfaction. Introspection does not enable A to discover what is going on in B's mind, nor B to discover what is going on in A's. There is no way of comparing the satisfactions of different people.⁶⁰

Robbins' *Essay* started a firestorm in economic theory, with a move toward the use of more empirical surrogates for utility, such as revealed preference.⁶¹ Ordinalism also signaled the start a "recovery" process in which neoclassical economics gradually moved once again to a much more limited view of the role of the state in the economy that limited intervention to the correction of market failures rather than some conception of distributive justice. In legal policy the ground was to shift even further. Indeed, ideas to the effect that greater equality of wealth produces greater aggregate welfare have been virtually banished from legal policy making.

Robbins' argument can be subjected to a number of criticisms, but interestingly they have attained more traction within economics and philosophy than they have in legal policy. One criticism is the same one that came to be made of the Vienna Circle's own "verification principle," which states that a non-analytic proposition has only that meaning that results from verification (thus Robinson's statement about blood streams).⁶² As later critics of logical positivism pointed out, the verification principle flunks its own test to the extent that it purports to describe how the world works and is not merely definitional.⁶³

⁶⁰ LIONEL ROBBINS, AN ESSAY ON THE NATURE AND SIGNIFICANT OF ECONOMIC SCIENCE 139-140 (1932; 2d ed. 1935). See also Lionel Robbins, *Interpersonal Comparisons of Utility: A Comment*, 48 ECON.J. 635 (1938).

⁶¹ E.g., John R. Hicks & R.G.D. Allen, *A Reconsideration of the Theory of Value*, 1 ECONOMICA 52 (1934); Paul Samuelson, *A Note on the Pure Theory of Consumer's Behaviour*, 5 ECONOMICA 61 (1938); and finally, Milton Friedman, "The Methodology of Positive Economics," in ESSAYS IN POSITIVE ECONOMICS 3 (1953).

⁶² See A.J. AYER, LANGUAGE, TRUTH, AND LOGIC (1936).

⁶³ E.g., See, e.g., Willard van Orman Quine, "Two Dogmas of Empiricism" in FROM A LOGICAL POINT OF VIEW (2d ed. 1961); THOMAS KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS (1970); WILFRED SELLARS, SCIENCE, PERCEPTION, AND REALITY (1963); LUDWIG WITTGENSTEIN, PHILOSOPHICAL INVESTIGATIONS (1953). See RICHARD RORTY, PHILOSOPHY AND THE MIRROR OF NATURE (1979).

A second criticism, quite relevant to policy making, is that ordinalism is based on a strict definition of welfare as subjective preferences, which are of course inherently unverifiable in that no one can measure another's state of mind. But policy making and economic practice have always relied on "objective" welfare judgments. For example, a farmer knows nothing about livestock's "state of mind," but uses objective indicia of productivity, freedom from disease, and so on. Further, the farmer interested in maximizing productivity (and who presumably knows nothing of marginalism) does not heap a disproportionate amount of available resources on one or a small number of head but rather equalizes them, perhaps with some proportioning according to individual size or other observed conditions. In sum, even the farmer applies the principles of diminishing returns and equality at the margin.

A third criticism is that Robbins definition ignored decades of evolutionary theory to the effect that "preferences" are nothing more than survival instincts, and that within the survival range they tend to be quite uniform from one (successful) organism to another. By treating individual preferences as radically indeterminate Robbins completely severed the connection between economics and evolutionary theory insofar as they purported to say something useful about human motivation.

Finally, and also important for public policy, Robbins theory of welfare – indeed, his entire definition of economics – is based entirely on consumption, not on production. It took no account of the role of human productivity, or "human capital," in the creation of value. Writing in the late 1920s Arthur C. Pigou had observed:

There is such a thing as investment in human capital as well as investment in material capital. So soon as this is recognised, the distinction between economy in consumption and economy in investment becomes blurred. For, up to a point, consumption is investment in personal productive capacity. This is especially important in connection with children: to reduce unduly expenditure on their consumption may greatly lower their efficiency in after-life. Even for adults, after we have descended a certain distance along the scale of wealth, so that we are beyond the region of luxuries and "unnecessary" comforts, a check to personal consumption is also a check to investment.⁶⁴

In sum, to the extent that government welfare policy is interested in productivity, its goal would be to produce productive citizens rather than states of mind reflecting maximum utility. This means investment in things such as food, clothing, shelter and education, understanding that the law of diminishing returns applies.

The Neoclassical Business Firm

⁶⁴ ARTHUR C. PIGOU, A STUDY IN PUBLIC FINANCE 29 (1928). The idea was to be developed much more fully and technically in GARY BECKER, HUMAN CAPITAL (1964).

The Revolution in Corporate Finance

Classical theory since the administration of Andrew Jackson strongly favored the business corporation as a device for amassing and deploying the capital of multiple shareholders. But it could also be an instrument of deception when managers overstated corporate value in order to induce high share prices or favorable loan rates. Under the classical theory of corporate finance the value of a corporation was its paid in capital, a backward looking amount. Stock was issued at a "par" value that reflected this amount. For example, if a firm issued 10,000 shares at a par value of \$5, those numbers represented the incorporator's assurance that the firm held \$50,000 of paid in capital. Stock was said to be "watered" when these numbers were exaggerated -- for example, when controlling owners put real property or other assets into the corporation at greatly overstated values.⁶⁵ Early Progressives made a career writing about the great "watered stock" controversies of the Gilded Age and early twentieth century.

One important value of classical finance theory was its susceptibility to measurement by tools available to any commercially literate judge. The classical corporation contemplated a system that was self executing and administered by courts, with the Secretary of State or another state official as prosecutor. At the same time, however, the classical theory seems to have very little to do with the current market value of a corporation, which is driven by expectations of profit rather than the amount previously paid in. Under marginalism corporate valuation is forward rather than backward looking. A firm with an enormous paid up investment in an obsolete technology might be worthless, while another firm with a small investment but a market shifting innovation might be worth a fortune. Beginning in the 1910s corporate finance theorists began to argue that prospects of future profits rather than previous investment should drive corporate valuation.⁶⁶ This led to the dropping of "par" as an attribute of corporate valuation.⁶⁷

The neoclassical theory of corporate finance was a much more realistic way to estimate corporate value, but it also came with its problems. The neoclassical theory depended on a firm's prospects rather than its history, and prospects were much more

⁶⁵ See, e.g., WILLIAM W. COOK, A TREATISE ON STOCK AND STOCKHOLDERS AND GENERAL CORPORATION LAW, §§21, 22, 28, 29 (2D ED. 1889); SEYMOUR D. THOMPSON, IV COMMENTARIES ON THE LAW OF CORPORATIONS §3903 (2D ED. 1910).

⁶⁶ E.g., WILLIAM LOUGH, BUSINESS FINANCE, ch. 8 (1917);

⁶⁷ E.g., William W. Cook, "Watered Stock" – Commissions – "Blue Sky Law" – Stock Without Par Value, 19 MICH.L.REV. 583 (1921)

amenable to speculation.⁶⁸ This change placed a greater premium on the good faith and reasonable expectations of managers and also required much greater detail and accuracy in corporate reporting. This change in conception, coupled with the massive business firm bankruptcies that occurred in the early 1930s, cried out for more aggressive regulation, which largely came at the federal level in the early 1930s.

The Separation of Ownership and Control

The "separation of ownership and control" is almost always associated with Adolph Berle and Gardiner Means' *The Modern Corporation and Private Property* (1932), sometimes called the "economic bible of the New Deal." Nevertheless, the concept dated back much earlier and was well established in the writings of Thorstein Veblen a decade earlier.⁶⁹ Indeed, the idea stretches all the way back to Adam Smith's observation in *The Wealth of Nations* that business managers of "other people's money" did not have the same incentives as those managing their own.⁷⁰

What is too often unappreciated is that the separation of ownership control as an idea about corporate structure was embraced by orthodox neoclassical economists just as much as by left-leaning institutionalists. The main difference was attitude. Berle and Means saw the separation of ownership and control as the source of corporate aggrandizement, inefficiency, and social irresponsibility. By contrast, neoclassicists ranging from Irving Fisher (Yale), Ronald Coase to Modigliani-Miller and Eugene Fama saw the separation of ownership and control as an essential key to corporate efficiency. Fisher's separation theorem, developed at the beginning of the twentieth century, showed that under its assumptions the profit function of a corporation could not be derived from the utility functions of its shareholders.⁷¹ Ronald Coase's article on "The

⁶⁸ See, e.g., James C. Bonbright, *No-Par Stock: Its Economics and Legal Aspects*, 38 Q.J. ECON. 440 (1924); James C. Bonbright, *Earning Power as a Basis of Corporate Capitalization*, 35 Q.J. ECON. 482 (1921).

⁶⁹ THORSTEIN VEBLEN, *ABSENTEE OWNERSHIP: BUSINESS ENTERPRISE IN RECENT TIMES* (1923).

⁷⁰ ADAM SMITH, *THE WEALTH OF NATIONS*, Book 5, ch. 1.3.1.2 (1776):

The directors of such companies, however, being the managers rather of other people's money than of their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company.

⁷¹ IRVING FISHER *THE NATURE OF CAPITAL AND INCOME* (1906).

Nature of the Firm,” contemporary with Berle and Means, established criteria for firm profit maximization in which the independent role of shareholders was entirely irrelevant.⁷² The Modigliani-Miller theorem in the 1950s, showed that under appropriate assumptions the value of a firm is invariant to its debt to equity ratio.⁷³ That is, ownership of the business firms is nothing more than an alternative way of getting financing. Finally, the efficient capital market hypothesis (ECMH) of the 1960s held that, under appropriate assumptions firm value at any given instant reflects the sum of knowledge about the firm’s prospects.⁷⁴ To the extent that the capital market is efficient, individual investors’ attempts to “beat the market” will fail. The result was the increased popularity of index investing and technical trading – situations in which a firm’s “owners” typically cannot even name the corporation’s CEO or identify the products that it sells. Indeed, in the case of index funds investors typically do not even know which stocks they “own.”

The Crisis in Competition Policy

The immediate result of marginalism in industrial economics was protracted study of the conditions under which markets would perform competitively, and an early realization that the conditions for perfect competition were very rare or nonexistent. This provoked first in England and a little later in the United States a strong distrust of markets and a corresponding belief that government corrections must be applied liberally and across a broad spectrum of situations. The view showed up in two areas. One was antitrust. The other was judgments about the appropriate scope and nature of government regulation.

The implications for antitrust policy in the United States was a great deal of intervention, a strong distrust of market concentration (markets with a small number of firms), a belief that “barriers to entry” were widespread and precluded competition in many market, a deep suspicion of product differentiation, and a strong distrust of patents. In 1940 John Maurice Clark attempted to bring some order out of this with a highly influential plea for “workable competition.”⁷⁵ The reigning belief about market structure and competition was the so called “structure-conduct-performance” paradigm, under which a particular market structure dictated a particular kind of conduct, which in turn dictated a particular kind of performance. As a result, conduct dropped out as an

⁷² Ronald H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* (n.s.) 386 (1937).

⁷³ Franco Modigliani & Merton H. Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, 48 *AM.ECON.REV.* 261 (1958).

⁷⁴ Eugene F. Fama, *The Behavior of Stock-Market Prices*, 38 *J.BUS.* 34 (1965). See MICHAEL C. JENSEN & CLIFFORD W. SMITH, JR., *THE MODERN THEORY OF CORPORATE FINANCE* 2-20 (1984).

⁷⁵ John Maurice Clark, *Toward a Concept of Workable Competition*, 30 *AM.ECON.REV.* 241 (1940).

independent variable of interest and antitrust policy makers attempted to go after structure directly. The result was an antitrust policy broadly dedicated to revising the structure of American industry by making firms smaller and more numerous.⁷⁶

Vertical Integration and the Relational Contract

This chapter continues and expands some of the developments treated in the chapter on the common law and contracts. One component in the perceived decline in competition was a suspicion of vertical integration, or situations where a firm might engage in two different levels of production, such as manufacturing and distribution or retailing. But the fear also showed up in a deep seated suspicion of contractual distribution mechanisms such as franchising. As a result antitrust developed aggressive rules about tying, exclusive dealing, and resale price maintenance that were often brought to bear against practices that today we would consider to be competitively harmless or benign. As a result the modern American distribution system, a wonder to behold, largely developed in spite of rather than because of American competition policy. Moreover, in order to develop modern franchising entrepreneurs had to get over some relatively high common law hurdles. For example, the common law as restated in Samuel Williston's highly influential treatise on contracts (1920) was hostile toward exclusive dealing contracts or other long term arrangements in which the relationship between the parties was ongoing but price and quantity were not established. However, the essence of contractual distribution schemes are long term contractual relationship in which prices and products that move from manufacturers to dealers are continually changing.

Against all of this Ronald Coase in 1937 wrote what was eventually to become a very influential article on "The Nature of the Firm" that found a perfectly benign explanation for vertical integration. Coase observed that use of the market has a cost. A firm bent on maximizing its profits will therefore always seek out the lowest cost means of doing something. For example, if it is cheaper for General Motors to purchase auto bodies it will buy them. If it is cheaper to make them itself it will do so. The aggregation of all of these decision determines the vertical boundaries of the firm. Coase's article, by his own observation, was virtually ignored for a quarter century. But in the 1950s the hostility toward vertical integration began to diminish as legal policy began to countenance its great potential for efficiency and lower prices.⁷⁷

Law, Technology, and the Inventive Step

⁷⁶ See Herbert Hovenkamp, *United States Competition Policy in Crisis, 1890-1955*, 94 MINN.L.REV. 311 (2009),

⁷⁷ See Herbert Hovenkamp, *The Law of Vertical Integration and the Business Firm: 1880-1960*, 95 IOWA L.REV. 863 (2010).

The Patent Act had always required that before something could be patented it must be novel – that is, different from anything that already existed in the prior art. However, the 1952 Patent Act added the additional requirement that this thing be “nonobvious” – that is, sufficiently different from the prior art that a person with “ordinary skill” would not likely have seen it.⁷⁸ While novelty is a backward looking concept, nonobviousness looks forward, reflecting the foresight of the unusually gifted person. Further, it creates a vast amount of uncertainty because it requires the patent system to predict what is foreseeable.⁷⁹

The Public Good, Social Cost and the Legal System

Economic and Regulatory Legislation

The rise and fall of the regulatory state very largely tracked prevailing neoclassical economics, with the legal policy lagging the economic theory by a generation or so. The first three generations of marginalists were generally suspicious of markets, finding that the conditions for perfect competition failed much more often than not, and that many manufacturing firms engaged in practices that either seemed anticompetitive or were not easily explained away. For example, Cambridge economist Joan Robinson closed her influential book on imperfect competition with a chapter entitled “A World of Monopolies,” remarking that monopoly of a certain kind was indeed much more common than the classicists had thought.⁸⁰ By the same token, neoclassicists through World War II regarded government regulation as a favorable alternative. Within legal policy these views are strongly reflected in Progressivism, the New Deal, the rise of agency administrative law and the growing hostility toward common law adjudication.

Beginning in the 1950s and accelerating in the 1960s, however, neoclassical economics went through a process that involved the gradual rehabilitation of private markets and a belief that most of them could work tolerably well, if not perfectly. At the same time, both economists and legal writers became increasingly aware of significant imperfections in the regulatory process. First, it seemed very costly in relation to relatively poor results, a point that James M. Landis brought home in his Report on Regulatory Agencies to President-elect Kennedy. Landis’ report was influential because a generation earlier he had been the author of the far more optimistic book,

⁷⁸ See CHRISTINA BOHANNAN & HERBERT HOVENKAMP, CREATION WITHOUT RESTRAINT: PROMOTING LIBERTY AND RIVALRY IN INNOVATION, Ch. 5 (2011).

⁷⁹ See John F. Duffy, *Inventing Invention: A Case Study of Legal Innovation*, 86 TEX.L.REV. 1 (2007).

⁸⁰ JOAN ROBINSON, THE ECONOMICS OF IMPERFECT COMPETITION, ch. 27 (1933).

The Administrative Process.⁸¹ Eventually, beginning in the late 1970s, the federal government adopted a broad policy of “deregulation,” in some cases eliminating entire agencies (Civil Aeronautics Board, Interstate Commerce Commission), and in other cases changing the rules so as to permit firms greater opportunity to enter markets, set their own prices, or introduce new products without significant agency review.

Also, beginning in the 1960s a group of economists began to apply neoclassical economic theory⁸² to “political” markets, and the result was not pretty. Economic theories about private trading in competitive markets tended to show efficient outcomes. By contrast, political markets tended to show either interest group capture or unstable cycling.⁸³ The effect was that, to a surprising degree, the classical political economists’ trust in private markets and distrust of government intervention, was restored.

The Rise of Modern Law and Economics

Arthur C. Pigou at Cambridge was the first economist to write extensively about the cost of moving resources from one portion of the economy to another.⁸⁴ In “The Nature of the Firm” (1937) and again in “The Problem of Social Cost” (1960), Ronald Coase focused on one particular cost of movement, namely bargaining or “transaction costs,” arguing that transaction costs are what makes a legal system relevant in a world in which economic efficiency is the exclusive concern of legal policy.⁸⁵ Stated most

⁸¹ JAMES M. LANDIS, *THE ADMINISTRATIVE PROCESS* (1938) (originally given as Storrs Lectures at Yale); JAMES M. LANDIS, *REPORT ON REGULATORY AGENCIES TO THE PRESIDENT-ELECT* (1960). See THOMAS MCCRAW, *PROPHETS OF REGULATION: CHARLES FRANCIS ADAMS, LOUIS D. BRANDEIS, JAMES M. LANDIS AND ALFRED KAHN* (1984).

⁸² In particular, that of EDWARD CHAMBERLAIN, *THEORY OF MONOPOLISTIC COMPETITION* (1933).

⁸³ See, e.g., MANCUR OLSON, JR., *THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS* (1965); JAMES M. BUCHANAN AND GORDON TULLOCK, *THE CALCULUS OF CONSENT: LOGICAL FOUNDATIONS OF CONSTITUTIONAL DEMOCRACY* (1962); KENNETH ARROW, *SOCIAL CHOICE AND INDIVIDUAL VALUES* (1951; 2d ed. 1963). Much of the theory, including reliance on the competition theory, was developed in RICHARD A. MUSGRAVE, *THE THEORY OF PUBLIC FINANCE: A STUDY IN POLITICAL ECONOMY* (1957).

⁸⁴ ARTHUR CECIL PIGOU, *THE ECONOMICS OF WELFARE*, pt. II, ch. 3, § 3 (4th ed. 1937). See Herbert Hovenkamp, *The Coase Theorem and Arthur Cecil Pigou*, 51 *ARIZ.L.REV.* 633 (2009).

⁸⁵ Ronald H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* (n.s.) 386 (1937); Ronald H. Coase, *The Problem of Social Cost*, 3 *J.L. & ECON.* 1 (1960). See Herbert Hovenkamp, *Coase, Institutionalism, and the Origins of Law and Economics*, 86 *IND.L.J.* 499 (2011); Herbert Hovenkamp, *Coasean Markets*, 31 *EUROPEAN J.L. & ECON.* 63 (2010).

simply, the Coase theorem says that markets without transaction costs will trade to efficiency. Within this paradigm, the role of the legal system is to minimize transaction costs, in part by assigning legal entitlements in such a way that further bargaining about them is unnecessary. Considering transaction costs often serves to make market much smaller because very small groups often can have bargaining issues with one another. This includes the single doctor and confectioner who had a dispute with one another in London over the confectioner's operation of noisy equipment.⁸⁶ It also includes a single married couple getting a divorce; partners contemplating dissolution or contractual modification; a tortfeasor and its likely or actual victim; or the dozen home owners downwind from a polluting smokestack. Descriptively, this suggested that many arrangements (everything from firms to marriages to patent pools to vertical integration) are best understood as devices for reducing transaction costs. On the normative side, it suggested that legal policy should generally assign losses to the person who can avoid them at least cost (e.g., title recording is cheaper than title searching; in product *manufacture* the producer can avoid the loss at least cost; in product *use*, the operator can do so; and so on). The debate over law and economics began mainly in tort law and nuisance, which is a concept of both tort and property law. In 1970 Guido Calabresi's book on *The Cost of Accidents* reintroduced a broader conception of costs of movement by arguing that a system concerned with minimizing the costs of accidents would seek to minimize the sum of (1) losses from accidents; (2) precaution costs; and (3) the costs of running the legal system for administering responsibility and recovery.⁸⁷

The law and economics movement is certainly the most influential legal movement in the United States since World War II, and has also had more influence on judges and legislators than any other ideology. Perhaps this is a result of the movement's own intellectual force, but perhaps its influence rests on the fact that conservatives have tended to have the political power and they tend to favor most of its conclusions. At the same time, however, law and economics has moderated ideologically since its inception, and today has both strictly neoclassical and behaviorist branches.

⁸⁶ *Sturges v. Bridgeman*, 11 Ch.D. 852 (1879), discussed at length in *The Problem of Social Cost*.

⁸⁷ GUIDO CALABRESI, *THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS* (1970).